

Abstract

A memory device has multiple bi-directional data paths. One of the multiple bi-directional data paths is configured to transfer data at one speed. Another one of the multiple bi-directional data paths is configured to transfer data at another speed.

- 5 The memory device has different modes. Depending on a certain mode, the memory device uses different combinations of the multiple bi-directional data paths to transfer data either at a single speed or at multiple speeds. In some cases, the data represents data information to be stored in memory cells of the memory device. In other cases, the data represents control information and feedback information to be
- 10 transferred to and from internal circuits, besides the memory cells, of the memory device.